

(NASA-TM-108682) TABLE OF NACA  
WIND TUNNELS: BRIEF DESCRIPTION OF  
NUMBERS 1 AND 2, 7 BY 10 FOOT AAL  
WIND TUNNEL (NASA) 3 p

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TABLE OF NACA (AAL) WIND TUNNELS

Symbol	Laboratory	Test section size and shape	Speed (m.p.h.)	Density and type	Type of work and measuring apparatus
7x10 No.1	7- by 10-foot Wind Tunnel	7'x10' rectangular	300	Atmospheric, closed throat, 2- and 3-dimen- sional	Determination of lift, drag, and stability characteristics of complete models. Also drag and interference effects of component parts. Two-dimensional studies and development using a semi- or partial-span model. Tail surface studies and develop- ment using semi-span models and floor of the tunnel as a reflection plane. Six- component balance system. 200 kw, 400 cycle variable- frequency power for driving model propellers.
7x10 No.2	7- by 10-foot Wind Tunnel	7'x10' rectangular	300	Atmos- pheric, closed throat, 3-dimen- sional	Determination of lift, drag, and stability characteristics of complete models. Also drag and interference effects of component parts. Six-component balance sys- tem. 200 kw, 400 cycle variable-frequency power for driving model propellers.

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Symbol	Laboratory	Test section size and shape	Speed (m.p.h.)	Density and type	Type of work and measuring apparatus
16' H.S.T.	16-foot High-speed Tunnel	16' diam. circular	600	Atmospheric, closed, 2- and 3-dimensional	Tests at high Reynolds number and high Mach number on large models of airplanes, and on full-scale parts of airplanes, including propellers, to determine performance stability and propeller efficiency. Boundary layer measurements, and wake surveys. Six frequency power supply for compressor base case sizes. Investigation of compressibility effects by means of force measurements, and model and full-scale propeller tests.